Special Issue

Anisotropic Functional Nanomaterials: Preparations, Characterizations, and Applications

Message from the Guest Editor

Anisotropic one- and two-dimensional nanoscale building blocks have fascinating and elegant physical and chemical properties that are dependent on their morphology and dimensions. In addition to the unique properties of anisotropic nanomaterials themselves, new functionalities can be actualized by surface modification and composites of anisotropic nanomaterials. In fact, it is expected that various types of anisotropic nanomaterials will be utilized in modern engineering practice in the near future; for example, different types of nanostructured thin films, fibrous composites, laminates, and multifunctional composites including anisotropic nanomaterials. This Special Issue (SI) will compile recent progress in research and development in the field of anisotropic nanomaterials with useful properties. The articles presented in this SI will cover various topics, ranging from but not limited to the optimization of fabrication methods of anisotropic nanomaterials, composite preparations, the functionalization of surfaces, sensors, catalysis, electronic devices, and solar cells, among others.

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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